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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,357	11/20/2003	Israel Levy	150.002	1664

7590 07/12/2004
Rashida A. Karmali
13th Floor
99 Wall Street
New York, NY 10005

EXAMINER

VALENTI, ANDREA M

ART UNIT	PAPER NUMBER
3643	

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,357

Applicant(s)

LEVY, ISRAEL

Examiner

Andrea M. Valenti

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,879,890 to Chen et al.

Regarding Claim 2, Chen teaches a novel technology for cultivation of seaweeds on land the technology comprising a plurality of land based sweater ponds (Chen Col. 2 line 54-64), designed to contain seawater enriched with nutrients and the ponds maintained under optimal conditions of temperature, light and air to allow optimal growth of seaweed throughout the year (Chen Col. 3 line 60-65).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,056,476 to Streichenberger in view of U.S. Patent No. 3,195,271 to Golueke et al and NoriTech-Seaweed Biotechnologies Ltd.

<http://www.naiot.com/html/life/noritech.htm> posted 03 December 2000 [retrieved from internet 29 June 2004] 3 pages.

Regarding Claims 1, 5, and 6, Streichenberger teaches a system for land based cultivation of seaweeds, the system has a laboratory facilities suitable to produce spores and sporlings in cultures (Streichenberger abstract and Col. 1 line 25); a plurality of sleeves to allow the maturation of the sporlings (Streichenberger Fig. 7).

Streichenberger teaches securing the sleeves under a body of seawater, but is silent on a plurality of small inoculation tanks containing seawater enriched with nutrients under optimal conditions to allow the mature sporlings to grow into seaweed pieces; and a plurality of large cultivation tanks to transfer the seaweed pieces into to grow to full size. However, Golueke et al teaches that land based seaweed cultivation is done in a culture inoculation tank (Golueke Fig. 1 #6). It would have been obvious to one of ordinary skill in the art to modify the teachings of Streichenberger with the teachings of Golueke at the time of the invention to provide a more controlled environment for the seaweed cultivation.

Streichenberger as modified is silent on the inoculation and the cultivation taking place in separate tanks. However, NoriTech teaches that it is well-known to cultivate seaweed in a network of artificial ponds (Noritech page 1 second paragraph). It would have been obvious to one of ordinary skill in the art to modify the teachings at the time of the invention since the modification is merely separating the steps into separate tanks to have better environmental control of the at different phases in the seaweed, to reduce

the possibility of pollutants, and to have continuous development for continuous production in an efficient manner.

Regarding Claim 3, Streichenberger as modified teaches the seaweed species grown in land based seawater ponds include Undaria (Streichenberger Col. 1 line 24).

Regarding Claim 4, Streichenberger as modified teaches the nutrients added to the seawater are designed to produce seaweeds that are used as food and pharmaceutical products (Streichenberger Col. 1 line 14-15).

Claim 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,056,476 to Streichenberger in view of U.S. Patent No. 3,195,271 to Golueke et al and NoriTech-Seaweed Biotechnologies Ltd as applied to claim 1 above, and further in view of U.S. Patent No. 5,350,588 to Campbell.

Regarding Claim 7, Streichenberger as modified is silent on drying and grinding the harvested seaweed. However, Campbell teaches drying and grinding harvest seaweed for food consumption (Campbell Fig. 1 and Col.1 line 25). It would have been obvious to one of ordinary skill in the art to modify the teachings of Streichenberger at the time of the invention as a means of processing the cultivated seaweed into a usable product for sale, storage, or consumption.

Regarding Claim 8, Streichenberger as modified teaches the large cultivation tanks contain suitable nutrients to ensure high yields of seaweed products having useful properties (Golueke Col. 2 line 33-35).

Regarding Claim 9, Streichenberger as modified teaches product useful as pharmaceutical product (Streichenberger Col. 1 line 14-15).

Regarding Claim 10, Streichenberger as modified teaches the product is useful as food component (Streichenberger Col. 1 line 14-15).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

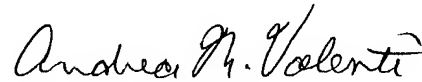
Japanese Patent JP 11113434A; Japanese Patent JP 2002238384; Japanese Patent JP 06217657; U.S. Patent No. 6,579,714; U.S. Patent No. 6,698,134; U.S. Patent No. 4,235,043; U.S. Patent No. 6,199,317; Japanese Patent JP 04210535.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 703-305-3010. The examiner can normally be reached on 7:30am-5pm M-F; Alternating Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 703-308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3643

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Andrea M. Valenti
Examiner
Art Unit 3643

29 June 2004



Peter M. Poon
Supervisory Patent Examiner
Technology Center 3600